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OPINION 553

Addition of the generic name Cyzicus Audouin, 1837 (Class Crustacea, Order Conchostraca), to the Official List of Generic Names in Zoology and matters incidental thereto

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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OPINION 553

ADDITION OF THE GENERIC NAME "CYZICUS" AUDOUIN, 1837 (CLASS CRUSTACEA, ORDER CONCHOSTRACA) TO THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" AND MATTERS INCIDENTAL THERETO

- RULING:—(1) The under-mentioned generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers severally specified below:—
 - (a) Cyzicus Audouin, 1837 (gender: masculine) (type species, by monotypy: Limnadia tetracera Krynicki, 1830) (Class Crustacea, Order Conchostraca) (Name No. 1346);
 - (b) Estheria Robineau-Desvoidy, 1830 (gender: feminine) (type species, by selection by Townsend (1916): Estheria imperatoriae Robineau-Desvoidy, 1830) (Class Insecta, Order Diptera) (Name No. 1347).
- (2) The under-mentioned specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers severally specified below:—
 - (a) tetracera Krynicki, 1830, as published in the combination Limnadia tetracera (specific name of type species of Cyzicus Audouin, 1837) (Class Crustacea, Order Conchostraca) (Name No. 1626);
 - (b) dahalacensis Rüppell, 1837, as published in the combination Estheria dahalacensis (Class Insecta, Order Diptera) (Name No. 1627);
 - (c) cristata Meigen, 1826, as published in the combination Dexia cristata (Class Insecta, Order Diptera) (Name No. 1628).
- (3) The under-mentioned generic name is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name No. 1263:—
 - Estheria Rüppell, 1837 (Class Crustacea, Order Conchostraca) (a junior homonym of Estheria Robineau-Desvoidy, 1830 (Class Insecta, Order Diptera)).
- (4) The under-mentioned family-group name is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 265:—
 - CYZICIDAE Stebbing, 1910 (type genus: Cyzicus Audouin, 1837) (Class Crustacea, Order Conchostraca).
- (5) The under-mentioned family-group names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Numbers severally specified below:—
 - (a) ESTHERIADAE Packard, 1874 (type genus: Estheria Rüppell, 1837) (an Erroneous Subsequent Spelling for ESTHERIIDAE) (Name No. 296);
 - (b) ESTHERIIDAE Claus, 1860 (type genus: Estheria Rüppell, 1837) (invalid because the name of the type genus is itself invalid as a junior homonym of an older generic name, Estheria Robineau-Desvoidy, 1830) (Name No. 297).

I. THE STATEMENT OF THE CASE

On 5th May 1955, Dr. N. T. Mattox (University of Southern California, Allan Hancock Foundation, Los Angeles, California, U.S.A.) addressed a preliminary enquiry to the Office of the Commission on the question of the possible addition to the Official List of Generic Names in Zoology of the generic name Cyzicus Audouin, 1837 (Class Crustacea, Order Conchostraca), a name which had been published as a replacement for the name Estheria Rüppell, 1837, which was invalid as being a junior homonym of Estheria Robineau-Desvoidy, 1830 (Class Insecta, Order Diptera). At that time there was some doubt as to the type species of this latter genus and for this and other reasons there was some delay in the completion of the application to the Commission in the present case. However, by 10th April, 1957, all these matters had been dealt with and on that date Dr. Mattox submitted the following application for consideration:—

Proposed addition of the name "Cyzicus" Audouin, 1837 (Class Crustacea, Order Conchostraca) to the "Official List of Generic Names in Zoology" and matters incidental thereto

By N. T. MATTOX

(University of Southern California, Los Angeles, California, U.S.A.)

The problem of proper generic and family names for certain Conchostracan Branchiopoda is of long standing. The present request is formulated in order to establish proper names for certain "estheriid" phyllopods of this group. Application is hereby made for the International Commission on Zoological Nomenclature to place the generic name Cyzicus Audouin, 1837 (Ann. Soc. ent. France 6: x) (gender: masculine) on the Official List of Generic Names in Zoology, and therefore also the family-group name CYZICIDAE Stebbing, 1910, should be placed on the Official List of Family-Group Names in Zoology.

- 2. The name Cyzicus was proposed by Audouin in 1837 (op. cit.) as the name for a new genus in order to separate the species Limnadia tetracera Krynicki, 1830 (Bull. Soc. imp. Nat. Moscou 2(11): 176) from the genus Limnadia Brongniart, 1820. Audouin pointed out the basic morphological differences, particularly in the male, separating the very different genus Limnadia from his new genus Cyzicus. A very complete description of the species Limnadia tetracera was given by Krynicki, hence there is no question as to the validity of that specific name. Audouin very clearly indicated characters for his new genus and referred Limnadia tetracera Krynicki to the genus Cyzicus. At the same time he placed in this genus a new nominal species which he called Cyzicus bravisii. He gave, however, no description for this species and the name Cyzicus bravisii so published must stand as a nomen nudum. Accordingly, the only validly established nominal species placed by Audouin in the genus Cyzicus was Limnadia tetracera Krynicki which is therefore the type species by monotypy.
- 3. During the same year as Audouin's publication Rüppell in Straus-Durckheim, 1837 (Abh. Senckenb. Mus. 2(2):117) described a new genus of conchostracan and introduced also the new species Estheria dahalacensis Rüppell (ibid. 2(2):126). The general characters of the genus Estheria Rüppell, as then given, were the same as those of the genus Cyzicus Audouin.

The generic name Estheria Rüppell must be considered invalid as it is a junior homonym of Estheria Robineau-Desvoidy, 1830 (Mém. présentées Acad. roy. Sci. Inst. France 2:305) (Class Insecta, Order Diptera). The name Estheria Robineau-Desvoidy is still used for this genus of European parasitic flies, and dipterists have indicated that there is no available synonym for the genus, should this name be ruled out. It was Keilhack in 1910 (Zool. Annal. z. Gesch. Zool. 3:177–184) who clearly indicated the homonymy of Estheria Robineau-Desvoidy and Estheria Rüppell. Keilhack also made it clear that Cyzicus Audouin should be used for the crustacean genus.

- 4. Recognizing the homonymy of Estheria Rüppell, in 1842 Joly (Ann. Sci. nat. (zool.) (2) 17:293) proposed the generic name Isaura Joly as the name for the genus of crustaceans in question. Joly stated that his genus Isaura was identical with Cyzicus Audouin, but he would not recognize Cyzicus because he considered the original description of Audouin to be inadequate. There can be no question about this point since the use of Cyzicus Audouin was clearly indicated as a new designation of the previously described Limnadia tetracera Krynicki. This complies with the Law of Priority, Article 25. Therefore, Isaura Joly, 1842, must be declared invalid as a junior objective synonyme of Cyzicus Audouin, 1837. A validation of the name Isaura Joly would cause much more confusion in modern literature than the use of the name Estheria Rüppell. As an objectively invalid name, the name Isaura Joly should now be placed on the Official Index of Rejected and Invalid Generic Names in Zoology.
- 5. Since the appearance of the work by Keilhack the name Cyzicus Audouin has gradually replaced the name Estheria Rüppell and is now in general use except for some attempts by certain paleontologists to validate the synonym Isaura Joly. Daday, 1915 (Ann. Sci. nat. (Zool.) 20(9): 39–330) in his monographic review of the conchostracans used the name Cyzicus recognizing the synonymy of Estheria Rüppell. Daday, 1923 (Ann. Sci. nat. (Zool.) 6(10): 337) retains Rüppell's original species, Estheria dahalacensis, in the genus Leptestheria Sars, 1898. Daday, 1915, also established certain other generic names resulting from the division of the "estheriid" crustaceans, thus completely dropping the old name Estheria Rüppell. This system set up by Daday is in universal use today.
- 6. As the generic name reference varied with different authors so has the family name. Baird in 1849 (Proc. zool. Soc. Lond. 17:84) incorrectly applied the family name LIMNADIIDAE with the genus Estheria Rüppell Dana in 1852 (U.S. Explor. Exped. 14(2): 1306) uses the generic name Cyzicus under the family LIMNADIIDAE which is a family of conchostracans with very different characters than those of Cyzicus. Many workers have followed Packard, 1874 (in Hayden's U.S. geol. geogr. Surv.: 618) using Estheria in the family ESTHERIADAE (later used as ESTHERIIDAE Sars, 1900 (Archiv. Math. Naturv. 22(6)). However, Stebbing in 1910 (Ann. S. Afr. Mus. 6(4): 486) properly established the family CYZICIDAE with Cyzicus Audouin as the type genus. In 1915, Daday, apparently unaware of the paper by Stebbing, in his classic monographic study on the Conchostracan Phyllopods divided the old genus Cyzicus Audouin into a number of genera. He set up the family CAENESTHERIIDAE with one of his genera divided from Cyzicus, namely, Caenestheria Daday, as the type genus (Ann. Sci. nat. (Zool.) 20(9): 49). Boch in 1953 (Journ. Paleo. 27(1): 62) used the generic name Isaura Joly in the family CYZICIDAE for some fossil forms. Pennak in 1953 (Fresh Water Invertebrates of the U.S.: 344) places all species in the

genus Caenestheriella Daday under the family CAENESTHERIIDAE, he does not use Cyzicus Audouin for any of the North American species. Various combinations of these names have been used by other paleontologists as well as by writers on the living species. It is readily seen that the proper names are the generic name Cyzicus Audouin in the family CYZICIDAE Stebbing. This follows the Copenhagen Decisions on Zoological Nomenclature: 36, Decision 54(1)(b) in which reference is made to family name changes resulting from the change of the type genus necessitated by this type becoming a junior homonym. The family name should then be CYZICIDAE, which would be based on the oldest available generic name for the group, namely, Cyzicus Audouin, 1837.

- 7. As part of the action to be taken in the present case, the generic name Estheria Robineau-Desvoidy, 1830 (Class Insecta, Order Diptera), which, as explained in paragraph 3 above, preoccupies the generic name Estheria Rüppell, 1837, in Crustacea, should be placed on the Official List of Generic Names in Zoology. Not being myself familiar with the entomological literature concerned, I asked the Secretary to the International Commission to consult with one of the specialists in the Order Diptera at the British Museum (Natural History) on the question of the species to be entered on the Official List as the type species of the above genus. Mr. Hemming accordingly consulted Dr. F. I. van Emden (Commonwealth Institute of Entomology, c/o British Museum (Natural History), London), who kindly furnished the information given below. It appears that the nominal species Dexia cristata Meigen, 1826 (Syst. Beschr. bekannt. europ. zweifl. Ins. 5:41) is currently treated by all authors as the type species of the genus Estheria Robineau-Desvoidy. It was indeed so selected by Robineau-Desvoidy himself in 1863. Technically, however, that selection is invalid, for the above nominal species was not cited as belonging to the genus Estheria when that genus was established in 1830. The nominal species then included did, however, comprise the then new nominal species Estheria imperatoriae (: 306), which today is generally identified with Dexia cristata Meigen, the names imperatoriae Robineau-Desvoidy and cristata Meigen being treated as synonyms of one another. The first valid type selection for the genus Estheria was that of E. imperatoriae Robineau-Desvoidy which was so selected by Townsend in 1916 (Insecutor Inscit. menstr. 4:7). The specific name cristata Meigen should be placed on the Official List of Specific Names in Zoology at the same time that the generic name Estheria Robineau-Desvoidy, 1830, is placed on the Official List of Generic Names in Zoology.
- 8. The proposals which I accordingly submit for consideration are that the International Commission on Zoological Nomenclature should:—
 - (1) place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
 - (a) Cyzicus Audouin, 1837 (gender: masculine) (type species by monotypy: Limnadia tetracera Krynicki, 1830) (Class Crustacea, Order Conchostraca);
 - (b) Estheria Robineau-Desvoidy, 1830 (gender: feminine) (type species, by selection by Townsend (1916): Estheria imperatoriae Robineau-Desvoidy, 1830) (Class Insecta, Order Diptera);

- (2) place the under-mentioned specific names on the Official List of Specific Names in Zoology:—
 - (a) tetracera Krynicki, 1830, as published in the combination Limnadia tetracera (specific name of type species of Cyzicus Audouin, 1837);
 - (b) dahalacensis Rüppell, 1837, as published in the combination Estheria dahalacensis (specific name for a species of Leptestheria Sars, 1889):
 - (c) cristata Meigen, 1826, as published in the combination Dexia cristata;
- (3) place the under-mentioned family-group name on the Official List of Family-Group Names in Zoology: CYZICIDAE Stebbing, 1910 (type genus: Cyzicus Audouin, 1837);
- (4) place the under-mentioned generic name on the Official Index of Rejected and Invalid Generic Names in Zoology:—
 - (a) Estheria Rüppell, 1837 (a junior homonym of Estheria Robineau-Desvoidy, 1830);
 - (b) *Isaura* Joly, 1843 (a junior objective synonym of *Cyzicus* Audouin, 1837);
- (5) place the under-mentioned family-group names on the Official Index of Rejected and Invalid Family-Group Names in Zoology:—
 - (a) ESTHERIADAE Packard, 1874 (an Invalid Original Spelling for ESTHERIIDAE);
 - (b) ESTHERIIDAE Sars, 1900 (correct spelling of ESTHERIADAE) (invalid because the name of the type genus is invalid as a junior homonym of an older generic name, *Estheria* Robineau-Desvoidy, 1830).

II. THE SUBSEQUENT HISTORY OF THE CASE

- 2. Registration of the present application: Upon the receipt in 1955 of Dr. Mattox's preliminary communication the question of the possible addition of the generic name Cyzicus Audouin to the Official List of Generic Names in Zoology was allotted the Registered Number Z.N.(S.) 955.
- **3. Publication of the present application:** The present application was sent to the printer on 15th April 1957 and on 28th June of the same year was published in Part 7 of Volume 13 of the *Bulletin of Zoological Nomenclature* (Mattox, 1957, *Bull. zool. Nomencl.* **13**: 206–209).
- 4. Support received from John A. Talent and comment on the date and status of the generic name "Isaura" Joly: On 10th September 1957, Mr. John A. Talent (Geological Survey of Victoria, Department of Mines, Melbourne, Victoria, Australia) addressed a letter to the Office of the Commission in which he indicated his support for the general purpose of the application submitted by Dr. Mattox but at the same time drew attention to certain minor matters

which required rectification. In particular, Mr. Talent brought forward an earlier reference for the generic name *Isaura* Joly than that cited in Mattox's application. This was of importance, because in consequence of it the above name was now seen to be an available name and as such ineligible for admission to the *Official Index of Rejected and Invalid Generic Names in Zoology*. The following is the document furnished by Mr. Talent:—

Comment on application by N. T. Mattox concerning the addition of the generic name "Cyzicus" Audouin, 1837 (Class Crustacea, Order Conchostraca), to the "Official List of Generic Names in Zoology" and matters incidental thereto

By JOHN A. TALENT

(Geological Survey of Victoria, Department of Mines, Melbourne, Australia)

I am sympathetic with the aims of Dr. Mattox's proposals in so far as they are intended to reinforce the generally accepted nomenclature of living and fossil Conchostraca, and particularly as the position outlined in this application is precisely that which results from strict application of the *Règles*. However, before any decision is made on this application, I feel that it is important to consider certain inaccuracies in the application as well as certain relevant information which appears to have been overlooked in framing the application.

- 2. In paragraph 4 of his application Dr. Mattox states that the generic name Isaura was proposed by Joly in 1842 (Ann. Sci. nat. (Zool.) (2) 17:293). This is not the earliest publication of *Isaura* as a valid generic name as it had been described previously in a preliminary notice (1841, C. R. Acad. Sci., Paris 13: 1068), a publication listed by Neave (Nomenclator Zoologicus 2: 785) and Sherborn (Index Animalium, Sectio Secunda: The generic name Isaura Joly therefore dates from 1841 and not from 1842 or 1843 as variously listed by Mattox (paragraphs 4 and 8). In this earlier publication only one species is described or mentioned, a new species *I. cycladoides*, which is therefore type species by monotypy. As *Cyzicus* Audouin, 1837, has another nominal species *Limnadia tetracera* Krynicki, 1830, as type species by monotypy, Isaura cannot be construed as an objective synonym of Cyzicus as claimed by Mattox. Some early workers contended that I. cycladoides was conspecific with L. tetracera, but this point of view has not been supported for over 60 years. All recent workers have considered them to be discrete, though congeneric, species. Isaura therefore ranks as a junior subjective (not objective) synonym of Cyzicus and as it does not threaten the status of any established generic name, there is no need to add it to the Official Index of Rejected and Invalid Generic Names in Zoology.
- 3. In paragraph 5 of his application Dr. Mattox states that "Cyzicus Audouin has gradually replaced the name Estheria Rüppell". This is not strictly true. Estheria Rüppell, considered in the sense of Rüppell and not of some subsequent authors has been gradually replaced by Leptestheria Sars, 1898 (not 1889—Mattox para. 8 (2c)). In 1898 Sars (Arch. Math. Naturv. 20: (6)9) erected Leptestheria for the group of Estheria dahalacensis Rüppell, the type species by monotypy of Estheria Rüppell, and proposed to limit the application of the generic name Estheria to the remaining

"estheriids" differing from this group. In effect, without realising it, Sars had erected a genus for precisely the group for which the generic name *Estheria* had been intended by Rüppell. *Leptestheria* Sars has now effectively replaced *Estheria* Rüppell (not Robineau-Desvoidy).

- 4. In paragraph 6 of his submission, Mattox states that "Boch [sic] in 1953... used the generic name Isaura Joly in the family CYZICIDAE for some fossil forms". This is not so. When Bock (J. Paleont. 27:65) resurrected the generic name Isaura he created a new family ISAURIDAE for its reception without indicating its relationship to the CYZICIDAE. Again in paragraph 6 Mattox states that the family CAENESTHERIIDAE was instituted by Daday in 1915 (Ann. Sci. nat. (Zool.) (9) 20:49). He has overlooked the fact that Daday's monograph of the Conchostraca was first published in Hungarian in 1913 (Math. term. Ert. 31:559-601; 32:49-145). The reference he cited is a republication in French and Latin with additions and deletions. The new families, genera and species described in the earlier work can be gleaned from Volume L-LI of the Zoological Record, the volume for 1914.
- 5. ESTHERIADAE Packard, 1874, is not the oldest family-group name based on *Estheria* Rüppell. It is antedated by the correctly formed ESTHERIIDAE Claus, 1860 (1860, *Beitrage zur Kenntniss der Entomostraken*, Marburg: 13), which, being based likewise on the invalid generic name *Estheria* Rüppell, should be added to the *Official Index of Rejected and Invalid Family-Group Names in Zoology*. ESTHERIIDAE Sars, 1900, does not rank then as a correction of ESTHERIADAE Packard and does not need to be added to this *Official Index*.
- 6. The nomenclatural position of *Estheria* Robineau-Desvoidy requires comment as the solution outlined in paragraphs 7, 8(1)(b) and 8(2)(c) of the Mattox application does not satisfy the requirements of the case as outlined in paragraph 7. Even if Townsend's 1916 selection of *Estheria imperatoriae* Robineau-Desvoidy, 1830, as type species is the first valid type selection, it would seem that the Plenary Powers should be invoked to have *Dexia cristata* Meigen, 1826, designated as type species as "it is currently treated by all authors as the type species of *Estheria* Robineau-Desvoidy" (Mattox, para. 7). This matter of type species may be only of technical importance as the two nominal species are generally regarded as synonyms. If *Estheria imperatoriae* is to be regarded as type species of *Estheria* Robineau-Desvoidy, as Mattox has proposed in paragraph 8 (1)(b), the specific name *imperatoriae*, as published in this combination, should be added to the *Official List of Specific Names in Zoology*.

7. To sum up :—

- (a) Isaura Joly is not an objective synonym of Cyzicus Audouin, and there are no grounds for adding it to the Official Index of Rejected and Invalid Generic Names in Zoology.
- (b) I do not agree that *Estheria imperatoriae* should be cited as type species of *Estheria* Robineau-Desvoidy. On the contrary there appears to be a *prima facie* case for using the Plenary Powers to have *Dexia cristata* Meigen designated as type species in harmony with accustomed usage.

- (c) ESTHERIIDAE Claus, 1860, antedate SESTHERIADAE Packard, 1874, as the oldest family-group name based on *Estheria* Rüppell and should be added to the *Official Index of Rejected and Invalid Family-Group Names in Zoology*. No action is necessary as regards Sars's use of the form ESTHERIIDAE in 1900.
- (d) I have no objection to the remaining family-group, generic and specific names of Conchostraca being added to the various *Official Lists* as proposed by Mattox.
- 5. Objection received from Paul Tasch: On 9th December 1957, Professor Paul Tasch (University of Wichita, Department of Geology, Wichita, Kansas, U.S.A.) addressed a letter to the Office of the Commission expressing his objection to the proposal submitted in this case. These views were summarised by Professor Tasch in the following statement included with the foregoing letter:—

Despite the Rules and *Declaration* 32, I request the Commission to use its Plenary Powers to validate the name *Isaura* Joly, 1842, and to invalidate the name *Cyzicus* Audouin, 1837, for the following reasons:

- (1) Cyzicus is a worthless name—"sans valeur" (Daday). Even though by the strict reading of the Rules and Declaration 32 it can be shown that Cyzicus is valid, though worthless in a biological sense, I maintain that biological sense should have priority over taxonomic exactness, when the two are in conflict.
- (2) Published validation of *Cyzicus*, though promised by Audouin, was never forthcoming. Granted, that by the Rules and *Declaration* 32, *Cyzicus* becomes, though biologically worthless, taxonomically acceptable and that *Limnadia tetracera* Krynicki by the same procedure becomes the type species by monotypy, I request the Commissioners to examine the implications of such a finding as it bears on the entire subject of "scientific documentation".

A decision in favor of *Cyzicus* means: (a) The incomplete work of a scientific investigator is being accorded the same status as the completed (i.e. fully documented) work of that or any other investigator; (b) We thus reintroduce the long-dead concept into Science that even pseudo-fact, quasi-sense and nonsense can be made scientifically respectable by fiat, authority or mutually agreed-upon rules. I maintain that no decision can elevate the "worthless" to any other status in scientific circles; (c) Audouin, who did not produce the evidence is accredited to be the author of a scientific name, based on the work of Krynicki who did produce the evidence. I maintain this to be patently absurd.

- (3) Daday, Dr. Mattox, and others, in accepting the name *Cyzicus*, proceeded on the erroneous basis that *Isaure*(s) Savigny, 1809, had priority, thus making *Isaura* Joly, 1842, invalid. Dr. Mattox now agrees, while maintaining in favor of *Cyzicus* by strict interpretation of the Rules, that the former (i.e. *Isaure*(s) Savigny) is a "ghost name".
- 6. Report prepared by the Secretary in December 1957: On 29th December 1957 the Secretary prepared for the consideration of the Commission a Report in which, after summarising the nature of the proposals submitted he (a) gave particulars of two minor corrections in those proposals, the need for which

had come to light since the publication of Dr. Mattox's paper in the *Bulletin of Zoological Nomenclature*, (b) drew attention to a counter-proposal submitted by Professor Paul Tasch (*University* of *Wichita*, *Kansas*, *U.S.A.*) and (c) explained the procedure proposed to be adopted for obtaining a decision in this case. The Report so submitted was as follows:—

Dr. N. T. Mattox's proposal for the addition to the "Official List of Generic Names in Zoology" of the generic name "Cyzicus" Audouin, 1837 (Class Crustacea, Order Conchostraca)

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The present note is concerned with an application submitted by Dr. N. T. Mattox (University of Southern California, Los Angeles, California, U.S.A.) for the addition to the Official List of Generic Names in Zoology of the generic name Cyzicus Audouin, 1837 (Class Crustacea, Order Conchostraca). In the following paragraphs particulars are given of certain points which have arisen in regard to this case since the time of its publication in the Bulletin of Zoological Nomenclature.

- 2. Purpose of the application as explained by Dr. N. T. Mattox: In the application submitted in this case Dr. Mattox explained that its purpose was to establish the generic name to be used for certain estheriid phyllopods which were formerly known by the name Estheria Rüppell, 1837. In 1910, however, Keilhack pointed out that this name was not available for this genus, it being a junior homonym of Estheria Robineau-Desvoidy, 1830, a name then and now used for a genus of European parasitic flies. Keilhack thereupon introduced the name Cyzicus Audouin, 1837, for the phyllopod genus till then known as Estheria Rüppell. Dr. Mattox explained that since the above date Cyzicus Audouin has gradually come into general use except by certain palaeontologists who have given preference to the junior synonym Isaura Joly, 1842.
- 3. Rectification as regards the generic name "Isaura" Joly, 1842: It was stated in the application that the generic name Isaura Joly, 1842, was a junior objective synonym of Cyzicus Audouin, 1837. Further investigation shows however, as Dr. Mattox now agrees, that this statement was incorrect. For it has now been ascertained that the name Isaura Joly does not date from Joly's paper of 1842, as was previously believed to be the case, but from a preliminary paper published in 1841, in which, though published in a peculiar manner, the name Isaura Joly was clearly introduced as the name for a separately established nominal genus. Thus, although a junior subjective synonym of Cyzicus Audouin, 1837, the name Isaura Joly, as of 1841, is itself an available name. In these circumstances Dr. Mattox has now withdrawn his former proposal that this name should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology.
- 4. Earliest family-group name based on the generic name "Estheria" Rüppell, 1837: Since the publication of the present application it has been ascertained that Packard (1874), who published the name ESTHERIADAE, was not the first author to establish a nominal family-group taxon having Estheria

Rüppell as type genus, such a taxon having been established, in the correct form ESTHERIIDAE, by Claus in 1860 (Beitr. Kenntn. Entomostrak.: 13). Any family-group name based on a generic name such as Estheria Rüppell which is invalid as a junior homonym of another generic name is itself invalid. Accordingly, the name ESTHERIIDAE Claus, 1860, should be placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology in place of the later name ESTHERIIDAE Sars, 1900, while the description in that Index of the name ESTHERIIDAE Packard, 1874, should be amended from "an Invalid Original Spelling for ESTHERIIDAE" to "an Erroneous Subsequent Spelling for ESTHERIIDAE".

- 5. **Publication of the present application:** The present application was published on 28th June 1957 (Mattox, 1957, *Bull. zool. Nomencl.* **13**: 206–209). The Prescribed Waiting Period therefore expired on 28th December 1957.
- 6. Comments Received: Two comments on this case were received in the Office of the Commission. Of the specialists concerned one (Talent) supported the action now recommended, while the other (Tasch) expressed objection thereto. Further particulars of these comments are given in the immediately following paragraphs.¹
- 7. Support received from John A. Talent (Geological Survey of Victoria, Melbourne, Victoria, Australia): On 10th September 1957, Dr. John A. Talent (Geological Survey of Victoria, Melbourne, Victoria, Australia) addressed a communication to the Office of the Commission in which (subject to the minor corrections noted in paragraphs 3 and 4 above) he supported Dr. Mattox's application in order thereby "to reinforce the generally accepted nomenclature of living and fossil Conchostraca".
- 8. Objection received from Paul Tasch (University of Wichita, Kansas, U.S.A.): On 9th December 1957, Professor Paul Tasch (University of Wichita, Kansas, U.S.A.) entered an objection to the proposals submitted in this case. While agreeing that under the Règles the name Cyzicus Audouin was an available name and had priority over the name Isaura Joly, Professor Tasch expressed the view that the name Cyzicus Audouin was ' in a biological sense". To accept that name would mean:—"(a) The incomplete work of a scientific investigator is being accorded the same status as the completed (i.e. fully documented) work of that of any other investigator; (b) we thus reintroduce the long-dead concept into science that even pseudo-fact, quasi-sense and nonsense can be made scientifically respectable by fiat, authority or appeal to mutually agreed-upon rules. I maintain that no decision can elevate the 'worthless' to any other status in scientific circles; (c) Audouin, who did not produce the evidence is to be the author of a scientific name, based on the work of Krynicki who did produce the evidence. I maintain this to be patently absurd." Professor Tasch concluded his comment by asking that the International Commission should use its Plenary Powers to suppress the name Cyzicus Audouin, for the purpose of rendering available for use its junior subjective synonym Isaura Joly.
- 9. Voting Procedure proposed to be adopted: All the necessary formalities have been taken to place the Commission in a position to take a vote on Dr. Mattox's proposal for the addition of the name *Cyzicus* Audouin to the

¹ For the full texts of the comments here referred to, see paragraphs 4 and 5 of the present *Opinion*.

Official List of Generic Names in Zoology, but this is not the case with Professor Tasch's counter-proposal which involves the possible use of the Commission's Plenary Powers. As that proposal has only just been received, the postponement of a vote on the present case until after six months Public Notice of Professor Tasch's counter-proposal had been given would involve a considerable and, as it might later be found, quite unnecessary delay in the handling of the present case. In the circumstances I have come to the conclusion that the proper course would be for the Commission now to make choice between (1) the acceptance of Dr. Mattox's proposals, as amended in respect of the two minor points noted in paragraphs 3 and 4 above, and (2) the postponement of the present case until such time as the formalities necessary to enable the Plenary Powers to be used as recommended in the counter-proposal submitted by Professor Tasch have been completed. Under this procedure it will be possible for the Commission to reach an immediate settlement of this case if it is impressed by the arguments brought forward by Dr. Mattox and the support given thereto by Dr. Talent. On the other hand, if the Commission is impressed by the arguments advanced by Professor Tasch, the vote now to be taken will provide it with an opportunity of giving expression to its views on this subject and will at the same time pave the way for the adoption at a later date of a decision under the Plenary Powers in the sense recommended by Professor Tasch.

- 10. Form of Voting Paper now submitted: For the reasons set out above the Commission is being invited in the Voting Paper (V.P.(58)1) to vote for one or other of the following Alternatives:—
 - (1) Alternative "A" (acceptance of Dr. Mattox's proposals relating to the generic name Cyzicus Audouin, 1837, subject to the two minor adjustments specified in paragraph 9 above);
 - (2) Alternative "B" (postponement of a decision on the present case in order to make it possible at a later date to vote on the counterproposal submitted by Professor Tasch that the Plenary Powers be used for the purpose of suppressing the name Cyzicus Audouin, 1837, in favour of the name Isaura Joly, 1842).

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- 7. Issue of Voting Paper V.P.(58)1: On 14th January 1958 a Voting Paper (V.P.(58)1) was issued in which the Members of the Commission were invited to vote for one or other of "the undermentioned Alternative Proposals relating to the generic name Cyzicus Audouin, 1837 (Class Crustacea, Order Conchostraca) as set out in paragraph 10 of the paper bearing the Registered Number Z.N.(S.) 955 submitted by the Secretary simultaneously with the present Voting Paper [i.e. in paragraph 10 of the paper reproduced in paragraph 6 of the present Opinion]:—
 - (1) Alternative 'A' (acceptance of Dr. Mattox's proposal relating to the generic name Cyzicus Audouin, 1837, subject to the two minor adjustments specified in the above paragraph);
 - (2) Alternative 'B' (postponement of a decision on the present case in order to take into consideration at a later date the counter-proposal by Professor Tasch that the Plenary Powers be used to suppress the name Cyzicus Audouin, 1837, in favour of the name Isaura Joly, 1842."

- 8. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 14th April 1958.
- 9. Particulars of the Voting on Voting Paper V.P.(58)1: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(58)1 was as follows:—
 - (a) In favour of Alternative "A" (Mattox proposal as amended in two minor respects), eighteen (18) votes:

Holthuis; Prantl; Hering; Bonnet; Jaczewski; Dymond; Vokes; Mertens; Bradley (J.C.); Hemming; Sylvester-Bradley; Cabrera; Hankó; Kühnelt; Riley; Tortonese; Boschma; Key;

(b) In favour of Alternative "B" (postponement to permit of the further examination of Tasch counter-proposal), five (5) votes:

Lemche; Mayr; Bodenheimer; do Amaral; Stoll;

- (c) On Leave of Absence, one (1): Miller.
- 10. Declaration of Result of Vote: On 15th April 1958, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(58)1, signed a Certificate that the Votes cast were as set out in paragraph 9 above and declaring that the proposal submitted as Alternative "A" in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 11. Preparation of the Ruling given in the present "Opinion": On 21st May 1958, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(58)1.
- 12. Original References for Generic and Specific Names: The following are the original references for the generic and specific names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion*:—

cristata, Dexia, Meigen, 1826, Syst. Beschr. bekannt. europ. zweifl. Ins. 5:41

Cyzicus Audouin, 1837, Ann. Soc. ent. France 6: x

dahalacensis, Estheria, Rüppell, 1837, in Straus-Durchheim, Abn. Senckenb. Mus. 2(2): 126

Estheria Robineau-Desvoidy, 1830, Mém. présentées Acad. roy. Sci. Inst. France 2: 305

Estheria Rüppell, 1837, in Straus-Durchheim, Abn. Senckenb. Mus. 2(2): 117 tetracera, Limnadia, Krynicki, 1830, Bull. Soc. imp. Nat. Moscou 2(11): 176

13. Reference for the selection of a type species of a nominal genus: The following is the reference for the selection of a type species for a nominal genus specified in the Ruling given in the present *Opinion*:—

For Estheria Robineau-Desvoidy, 1830

Townsend (C.H.T.), 1916, Insecutor Inscit. menstr. 4:7

14. Original References for Family-Group Names: The following are the original references for the family-group names placed by the Ruling given in the present *Opinion* on the *Official List* or, as the case may be, on the *Official Index* of names of taxa belonging to the family-group category:—

CYZICIDAE Stebbing, 1910, Ann. S. Afr. Mus. 6(4): 486

ESTHERIADAE Packard, 1874, in Hayden's U.S. geol. geogr. Surv.: 618

ESTHERIIDAE Claus, 1860, Beitr. z. Kenntn. der Entomostraken: 13

- 15. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- 16. "Opinion" Number: The present *Opinion* shall be known as *Opinion* Five Hundred and Fifty-Three (553) of the International Commission on Zoological Nomenclature.

Done in London, this Twenty-First day of May, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

